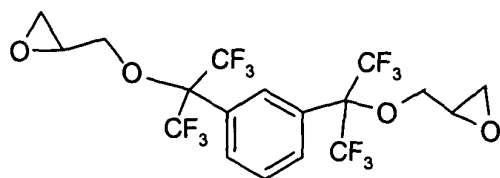


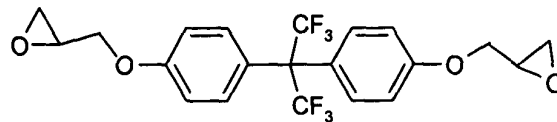
CLAIMS

What is Claimed is:

- 1 1. A linear polymer comprising:
2 at least one bisphenol monomer attached to at least one chromophore, and at least
3 one first diepoxy monomer including at least one fluorine atom, and at least one second
4 diepoxy monomer including no fluorine atoms; and
5 wherein said linear polymer includes an index of refraction between the range of
6 about 1.58 to about 1.66 measured at a wavelength of about 1300 nm.
- 1 2. The polymer according to Claim 1, wherein said polymer molecular weight average is
2 between about 10,000 and about 100,000 daltons.
- 1 3. The polymer according to claim 1, wherein said bisphenol component further comprises
2 a second chromophore comprising at least one of nitrophenyl azo, azomethine, stilbene,
3 hydrazone, nitrophenyl hydrazone chromophores, and thienylene-vinylene.
- 1 4. The polymer according to claim 1, wherein said bisphenol monomer further comprises
2 two nitrophenyl hydrazone chromophores.
- 1 5. The polymer according to claim 1, wherein said first diepoxy monomer comprising at
2 least one of:
3



diepoxy Y¹

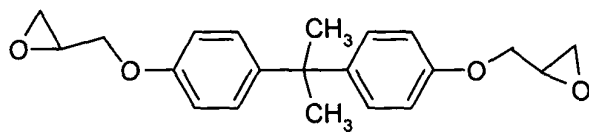


diepoxy Y²

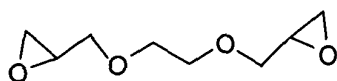
4

5

- 1 6. The polymer according to claim 1, wherein said second diepoxy monomer comprising
2 at one least of:

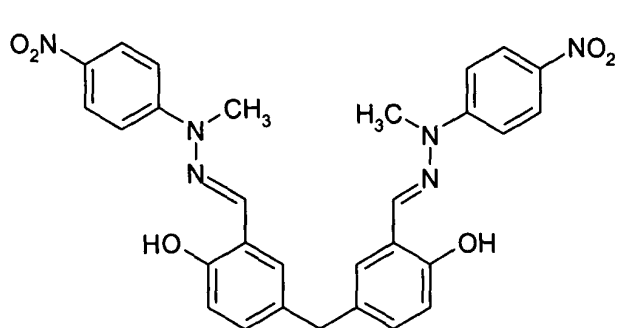


diepoxy X¹

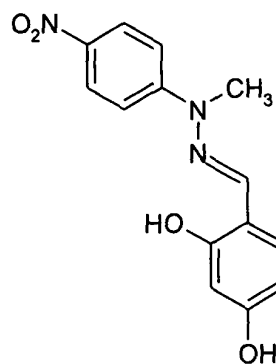


diepoxy X²

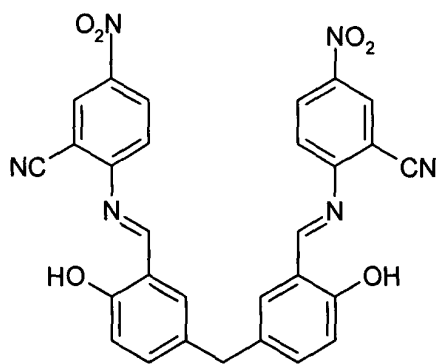
7. The polymer according to Claim 1, wherein said bisphenol monomer comprising at least one of:



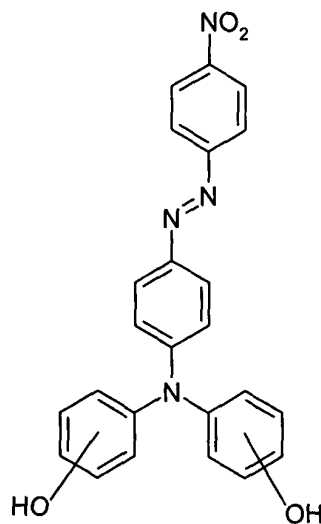
chromophore Z¹



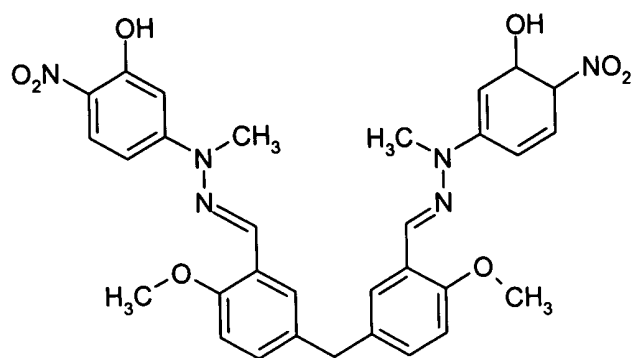
chromophore Z²



chromophore Z³



chromophore Z⁴



chromophore Z⁵

5

6

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